EXHIBIT B

Energy Intelligence

Natural Gas Week

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NATURAL GAS WEEKLY SPOT PRICES

Flow Dates: 3/13-3/19

Price Point	$/MMBtu	Chg.	High	Low	Avg. Daily Vol.	Avg. Daily Deals	Mar. Bid Week
GULF COAST							
ANR SE	2.01	-0.19	2.10	1.92	48,941	10	2.41
Col. Gulf - Erath	2.04	-0.16	2.11	1.96	30,857	7	2.41
Col. Gulf - Rayne	2.01	-0.18	2.14	1.87	161,343	27	2.40
Florida Zone 1	—	—	—	—	—	—	—
Florida Zone 2	2.07	-0.13	2.19	1.99	3,738	1	2.45
Florida Zone 3	2.23	-0.10	2.28	2.17	20,138	2	2.48
Henry Hub	2.08	-0.15	2.18	1.95	172,257	22	2.44
NGPL-LA	—	—	—	—	—	—	—
Sonat	2.03	-0.19	2.13	1.94	154,583	19	2.44
Tenn 500 So LA Z1	1.98	-0.25	2.15	1.90	76,134	11	2.45
Tenn 800 So LA Z1	2.01	-0.20	2.12	1.90	114,165	18	2.48
Tetco ELA	2.02	-0.16	2.11	1.95	42,476	12	2.44
Tetco WLA	2.03	-0.18	2.12	1.96	42,850	9	2.46
TGT Zone SL	1.99	-0.21	2.13	1.95	27,000	5	2.41
Transco Station 45	2.02	-0.19	2.11	1.95	19,971	4	2.42
Transco Station 65	2.07	-0.16	2.15	2.00	26,213	6	2.45
Trunkline ELA	1.99	-0.20	2.11	1.90	47,643	8	—
Trunkline WLA	1.98	-0.22	2.09	1.93	16,843	2	2.36
Trunkline Zone 1A	1.98	-0.20	2.15	1.92	98,529	8	2.41
Regional Average	2.03	-0.19					2.43
TEXAS (SOUTH/EAST)							
Carthage Hub	2.01	-0.16	2.10	1.90	19,457	4	2.39
HSC	2.01	-0.19	2.15	1.92	41,086	5	2.37
Katy Hub	1.99	-0.18	2.14	1.91	240,514	21	2.49
NGPL-South Texas	1.94	-0.20	2.07	1.90	25,014	5	2.38
NGPL-TexOk	1.97	-0.24	2.11	1.87	361,774	48	2.43
Tenn Zone 0	1.94	-0.20	2.07	1.89	117,876	15	2.44
Tetco-East Texas	1.92	-0.28	2.00	1.88	7,857	3	2.36
Tetco-South Texas	2.01	-0.10	2.06	1.97	3,071	1	2.35
TGT Zone 1	2.02	-0.17	2.13	1.94	86,186	14	2.40
Transco Station 30	1.97	-0.19	2.10	1.92	31,841	7	2.39
Regional Average	1.98	-0.20					2.43
TEXAS (WEST)							
El Paso Permian	1.93	-0.20	2.07	1.88	233,914	18	2.41
NNG Custer	—	—	—	—	—	—	—
Transwes E of Thoreau	—	—	—	—	—	—	2.38
Waha Hub	1.98	-0.22	2.11	1.90	56,843	11	2.39
Regional Average	1.94	-0.22					2.41
MIDCONTINENT							
ANR SW	1.94	-0.26	2.04	1.85	16,665	6	2.35
CenterPoint East	1.92	-0.23	2.08	1.85	64,557	14	2.29
CenterPoint West	1.93	-0.16	2.07	1.84	17,805	4	—
NGPL-MC	1.92	-0.21	2.04	1.84	303,957	38	2.43
Oneok	1.96	-0.15	2.04	1.91	22,671	2	2.33
Panhandle	1.91	-0.18	2.02	1.84	157,174	17	2.36
Southern Star	1.93	-0.20	2.00	1.88	12,757	2	2.30
Regional Average	1.92	-0.21					2.35
GREAT PLAINS							
Emerson	2.16	-0.13	2.25	2.05	324,647	29	2.49
NB Ventura TP	1.91	-0.27	2.07	1.85	149,314	10	2.45
NNG Demarc	1.93	-0.27	2.09	1.89	136,632	22	2.48

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Tax Credits for NGVs Poised for Reform in US Congress This Year

The structure of tax incentives for natural gas vehicles (NGVs) is poised for reform this year, with the Obama administration and congressional supporters trying to make tax credits for new NGV purchases more generous while settling the government's resulting debt with new fees on natural gas fuel purchases.

First, though, lawmakers will need to decide whether to even extend the credits in the first place, which could be tricky given the anti-spending mood in Washington — but also a potential bargaining chip for an energy priority that enjoys bipartisan support.

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Decline in Gas-Directed Drilling Too Late to Salvage 2012 Prices

Although the number of rigs searching for natural gas in the US has declined significantly in recent months, persistent growth in the number of rigs searching for oil – and associated gas produced from new oil wells — is offsetting the supply-side declines that many analysts had expected would result from a lower gas-directed rig count.

The gas-directed rig count dropped below 700 rigs in February, but the reduction has so far done little to dampen the surplus of gas that is placing downward pressure on US spot prices.

Futures at the benchmark Henry Hub are trading at

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Shell Says Massive Prelude FLNG Vessel Only First of Many to Come

Royal Dutch Shell is so confident that the design for the floating LNG (FLNG) liquefaction vessel will be the first of many that it has signed a master agreement for construction of a series of the massive structures with the Technip-Samsung Consortium, Shell officials said last week during a briefing with journalists at its technology center in Riswijk, The Netherlands.

"Prelude FLNG will be the first of many," said Marjan Van Loon, vice president of LNG at Shell Projects & Technology. The vessel, now under fabrication in South Korea, is expected to go into operation around 2017 at

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NATURAL GAS WEEKLY SPOT PRICES (cont.)

Flow Dates: 3/13-3/19

Price Point	$/MMBtu	Chg.	High	Low	Avg. Daily Vol.	Avg. Daily Deals	Mar. Bid Week
NNG Ventura	1.92	-0.26	2.09	1.84	261,521	24	2.47
Regional Average	2.01	-0.22					2.48
UPPER MIDWEST							
Alliance	2.07	-0.17	2.20	1.99	31,657	5	—
ANR ML7	2.11	-0.24	2.32	2.07	36,330	2	2.75
Chicago Citygate	2.09	-0.19	2.43	1.90	1,224,811	105	2.62
Consumers	2.22	-0.16	2.32	2.16	219,980	32	2.60
MichCon	2.24	-0.12	2.35	2.15	287,533	32	2.62
Regional Average	2.13	-0.17					2.62
SOUTHEAST							
Tetco M1	2.02	-0.17	2.09	1.93	93,337	15	2.42
Transco Zone 4	2.04	-0.20	2.17	1.94	270,245	30	2.47
Transco Zone 5	2.14	-0.24	2.26	1.99	60,489	6	2.78
Regional Average	2.05	-0.19					2.45
APPALACHIA							
Col. Gas App. Pool	2.06	-0.20	2.22	1.90	358,789	55	2.46
Dominion North	2.03	-0.25	2.20	2.00	17,803	2	2.50
Dominion South	2.05	-0.23	2.21	1.93	332,406	52	2.47
Lebanon Hub	2.05	-0.20	2.21	1.95	99,786	13	2.48
Regional Average	2.05	-0.21					2.47
EASTERN CANADA							
Dawn	2.51	-0.11	2.56	2.40	486,400	54	2.86
Iroquois	2.55	-0.51	2.70	2.40	468,993	60	3.09
Niagara	2.44	-0.32	2.58	2.09	15,857	1	2.86
Regional Average	2.53	-0.29					2.93
NORTHEAST / MIDATLANTIC							
Algonquin	2.28	-0.86	2.65	2.15	333,529	41	3.06
Dracut	2.53	-1.92	3.00	2.25	4,154	1	—
Iroquois Zone 2	2.54	-0.66	2.68	2.43	124,500	19	3.07
Tenn Gas Zone 6	2.32	-0.85	2.55	2.10	194,655	30	3.05
Tetco M3	2.14	-0.28	2.35	2.05	335,567	39	2.69
Transco Z6 - Non-NY	2.14	-0.25	2.29	2.04	196,590	24	2.67
Transco Z6 - NY	2.19	-0.27	2.38	2.08	218,031	34	2.78
Regional Average	2.24	-0.49					2.86
ROCKIES							
Cheyenne Hub	1.89	-0.18	2.00	1.87	93,943	10	2.41
CIG	1.87	-0.21	1.94	1.85	26,629	5	2.38
Kern River / Opal	1.95	-0.15	2.10	1.90	376,788	26	2.42
NW Rockies	1.93	-0.15	2.02	1.88	11,814	2	2.38
Questar	1.89	-0.15	2.03	1.84	60,300	8	2.30
Regional Average	1.93	-0.16					2.40
SAN JUAN BASIN							
El Paso Bondad	1.92	-0.16	2.00	1.88	27,043	3	2.35
El Paso San Juan	1.94	-0.19	2.08	1.89	310,265	33	2.40
Regional Average	1.94	-0.19					2.40
PACIFIC NORTHWEST/WESTERN CANADA							
AECO	1.75	0.08	1.82	1.62	1,594,226	74	1.94
Kingsgate	2.09	0.03	2.11	1.98	15,857	1	—
Malin	2.09	-0.08	2.17	1.98	262,729	18	2.43
NW Sumas	2.20	0.05	2.25	2.10	114,343	15	2.47
Stanfield	2.10	-0.01	2.15	1.97	95,771	9	—
Westcoast Station 2	1.72	0.03	1.79	1.64	174,288	30	1.89
Regional Average	1.83	0.08					2.00
CALIFORNIA							
Kern - Wheeler Ridge	2.19	-0.08	2.25	2.12	150,329	10	—
PG&E Citygate	2.46	0.01	2.57	2.42	650,000	35	2.84
PG&E South	2.14	-0.18	2.24	2.10	68,743	5	—
SoCal Border	2.17	-0.12	2.31	2.09	917,451	55	2.63
SoCal Citygate	2.34	-0.11	2.44	2.23	159,569	16	2.73
Regional Average	2.28	-0.08					2.68
WEEKLY COMPOSITE SPOT PRICES							
Wellhead	1.99	-0.21					
Delivered	2.15	-0.33					

Southeast Pennsylvania Tapped as Coveted Shell Ethane Cracker Site

Shell Chemical has signed an agreement for a parcel of land in Pennsylvania where it hopes to build a multibillion-dollar ethane cracker. The facility would be the first built in the Appalachian region to process ethane from the liquids-rich Marcellus Shale.

Shell called the land, located in the borough of Monaca, 25 miles northwest of Pittsburgh and currently home to a zinc factory, the "preferred site" for the facility, which could also include polyethylene and mono-ethylene glycol units.

The current owner, Horsehead Corp. says it will have to vacate the property by Apr. 30, 2014. It will move to a new facility now being built in North Carolina.

In choosing the location, Shell said it had evaluated access to liquids-rich gas, water, roads, rail lines and power grids in addition to an appropriate set-up to accommodate later expansions for the "world scale facility" it intends to build.

Shell's decision to place a new source of industrial demand near prolific shale gas development is part of a growing trend. Chevron and ConocoPhillips announced a joint

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Bill Sends Macondo Fines to Gulf States

The federal government has not decided on the extent of fines that will be levied against companies involved in the Macondo disaster, but the US Senate has found a way to spend the money.

In a 74-22 bipartisan vote, the US Senate approved a transportation bill that includes the RESTORE Act. The act creates the Gulf Coast Restoration Trust Fund, which will be funded by 80% of civil penalties assessed under the Clean Water Act in connection with the Macondo disaster. The money will be dispersed among the Gulf Coast states according to a funding formula.

A RESTORE Act amendment, offered by US Rep. Steve Scalise (R-Louisiana) passed the House in February.

US Sen. Mary Landrieu (D-Louisiana) introduced the act in July 2011 with US Sen. Richard Shelby (R-Alabama). They said the act will funnel money from the fines to the states where the damage was done.

They added that the Gulf Coast needs the financial boost as it continues to recover from a series of catastrophes since the mid-2000s, including hurricanes Katrina, Rita and Ike.

Now headed for the House, the Senate's $109 billion bill would reauthorize surface-transportation programs through fiscal 2013. The programs are set to expire Mar. 31.

The RESTORE Act would:

- Dedicate 80% of Clean Water Act penalties charged to BP — which could be from $1,100 per barrel for $5.4 billion to $4.300 per barrel if a finding of gross negligence of $21.1 billion — for the restoration of the Gulf Coast;
- Establish a Gulf Coast Ecosystem Restoration Council and a comprehensive plan for the Gulf Coast focused on ecosystem and coastal restoration; and
- Establish a long-term Science and Fisheries Endowment and Gulf Coast Centers for Excellence.

John A. Sullivan, Houston

Ethane ...

(continued from page 2)
venture to build an ethane cracker in Texas last December.

Pennsylvania, Ohio and West Virginia had been in fierce competition to house the facility by offering tax breaks and other incentives. It wasn't clear what incentives Pennsylvania had offered Shell, or how much the facility would ultimately cost.

Next steps include additional environmental analysis, "further engineering design studies, assessment of the local ethane supply and continued evaluation of the economic viability of the project," Shell said.

The project could generate thousands of construction jobs and economic activity in an area of the country that has been economically depressed.

Dennis Yablonsky, chief executive of the Pittsburgh Regional Alliance and Allegheny Conference on Community Development, called the announcement "historic," saying it will mark "the single largest from-the-ground-up industrial investment in the Pittsburgh region in a generation."

But the actual construction of the ethane cracker isn't a slam dunk, Shell Chief Executive Peter Voser said on the sidelines of the IHS CeraWeek 2012 conference earlier this month. The final investment decision sanctioning its construction is still be "quite a few years away."

The ethane cracker project is one of several integrated developments that Shell is evaluating in North America, which also include gas-to-liquids and LNG for transport, Voser said. However, one thing all the developments have in common is that "gas becomes more of a cost component rather than an absolute price component."

Matthew Zeidel, New York

US April NatGas Futures Holding Steady; Bullish Indications Seen

The April US natural gas contract saw little change last week, remaining near decade-low levels as weather forecasts offer little hope for a surge in late-winter demand. Still, there was some overall volatility, as the prompt-month contract fell to $2.204 on Tuesday, an intraday low not seen since 2002, but rebounded by week's end as bargain hunting pushed the contract as high as $2.362 on Friday.

The market also got some bullish relief when the US Energy Information Administration reported a 64 billion cubic foot withdrawal for the week ended Mar. 9, bringing working gas inventories to 2,369 Bcf. The moderately strong draw was well over analysts' consensus for a pull in the upper 50s and it caused the year-on-year surplus to fall 4 Bcf to 735 Bcf, or 43.6%. But bearishly, the surplus to the five-year average gained 15 Bcf to hit 807 Bcf, or 51.7%.

"Given temperatures as much as 15 degrees above seasonal norms for vast swaths of the country ... the question," said analyst Stephen Schork, "was not whether the delivery would be bad, but rather 'how bad?' Surprisingly the answer is not that bad."

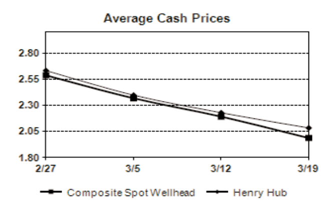
Parsing the data, Schork noted that it was not only the largest delivery for the week since 2008, it was "surprisingly firm" given the heating degree days for the period.

Canaccord Genuity analyst Ryan Oatman noted that the size of the delivery indicates the market has been undersupplied by about 3 Bcf/d on a weather-normalized, four-week moving-average basis, which is a bullish improvement over being 2 Bcf/d undersupplied the prior week.

"The weather's just been very bad," Oatman said. "Ex-weather, we have been undersupplied for almost a month now. But we're going to exit the heating season with 750-plus Bcf in storage versus last year, so we need to be 3 to 4 Bcf/d undersupplied over the cooling season just to put us at 2011 levels come this Nov. 1."

Schork also noted the untenable glut of underground storage, which is now poised to carry more than 2.3 trillion cubic feet into the injection season, "almost double the 1.25 Tcf average storage level for the end of March."

Weather continues to be the driving fundamental keeping prices low. The National Oceanic and Atmospheric Administration said in its latest weather outlook for the April-June period that above-average temperatures are most likely from the Desert Southwest through the central and southern Great Plains, the Great Lakes and the Eastern US.



However, the flip side of above-normal temperatures could be an early onset of cooling demand.

"Perhaps there are expectations that this will be another hot summer due to the lack of a winter and early shoulder warmth," Gelber & Associates analyst Pax Saunders said in a note.

A few times last week it was only the prompt-month contract that declined, while the rest of the 12-month strip moved higher. By Friday, the 12-month strip had inched closer to the $3 mark, gaining 9.9¢ to end the week at $2.916.

"All eyes might be shifting toward a potential 'early' first injection next week. We use early loosely because in recent years we've seen a few mid-March injections as weather has cooperated and production has been dialed up," Saunders said.

One factor that could be helping the demand picture is seasonal nuclear plant maintenance and refueling outages that pushed the amount of gas needed if it were to replace that generation to 4.32 Bcf/d at week's end, up from 3.83 Bcf/d a week earlier.

On another bullish note, the Baker Hughes report showed that while oil-focused rigs moved up by 21 to 1,317 last week, natural gas-focused rigs in the lower 48 moved down by seven, bringing the count to 663.

The April gas contract ended Friday's session up 4.7¢ at $2.326/MMBtu, up 0.2¢ for the week. April crude posted a

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INTRASTATE WEEKLY SPOT PRICES

Flow Dates: 3/13-3/19

Price Point	$/MMBtu	Chg.	High	Low	Avg. Daily Vol.	Avg. Daily Deals	Mar. Bid Week
Louisiana Intras	2.129	-0.051	2.20	2.00	41,514	2	—
Oklahoma Intras	1.961	-0.165	2.04	1.91	25,103	2	2.33
South Texas Intras	1.943	-0.237	2.09	1.92	5,286	1	—
West Texas Intras	—	—	—	—	—	—	—

NatGas ...

(continued from page 3)

$1.95 gain Friday to end the session at $107.06/bbl, falling 34¢ for the week.

Friday's Commodity Futures Trading Commission's Commitment of Traders report for the week ended Mar. 13 showed noncommercials in about 60.6% short futures only positions for the week.

Tom Haywood and Lisa Lawson, Houston

Ohio Links Quakes to Injection Well; Rolls Out New Regulations

Ohio officials have linked a series of earthquakes around Youngstown to a saltwater injection well that was disposing of wastewater from hydraulic fracturing operations.

At the same time state officials were announcing the result of their quake study, other officials were announcing some of the nation's toughest new laws on how to deal with brine wastes. The US Environmental Protection Agency gave Ohio regulatory authority over its deep well injection program in 1983, after saying the state regulations met or exceeded federal standards.

The Ohio Department of Natural Resources (ODNR) said 12 quakes occurred in 2011 within a mile of a Class II injection well in Youngstown owned and operated by D&L Energy.

"A number of coincidental circumstances appear to make a compelling argument for the recent Youngstown-area seismic events to have been induced," including the timing, location and depth of the earthquakes in relation to the well, the report said.

Some of the epicenters were determined to be less than 1,000 feet from the wellbore.

The report said that D&L Energy began injecting drilling brine into its Northstar I well to about 9,200 feet in December 2010. The first of the tremors was reported in March 2011 with a 4.0 earthquake that hit New Year's Eve 2011.

The well was ordered to shut down in January 2012, and state officials said the earthquakes began tapering off. When drilling the disposal well, the report said, D&L Energy had the misfortune to hit a Precambrian rock formation and a previously unknown fault line that was described as being "in a near-failure state of stress."

Acting as a lubricant, the wastewater helped cause the fault line to slip, causing the earthquakes. Similar incidents involving earthquakes and injection wells were reported in February 2011 around Guy, Arkansas, and from October 2008 to May 2009 near the Dallas-Fort Worth International Airport.

D&L Energy questioned the results of the ODNR study, saying that there is "no reason to rush and accept bad or incomplete science." It also noted that the well complied with all state regulations at the time it was ordered shut down.

Even as the link was being debated, the state unveiled a series of new regulations dealing with wastewater injection wells that would give Ohio some of the toughest rules in the nation.

"Ohioans demand smart environmental safeguards that protect our environment and promote public health. These new standards accomplish this goal," said ODNR Director James Zehringer.

Among the new safeguards:

- No new wells will be drilled into the Precambrian basement rock formation;
- Operators much submit extensive geological data before drilling;
- Disposal wells must have state-of-the-art pressure and volume monitoring systems, including automatic shut-off switches and data recorders.

Zehringer added that ODNR will also require brine

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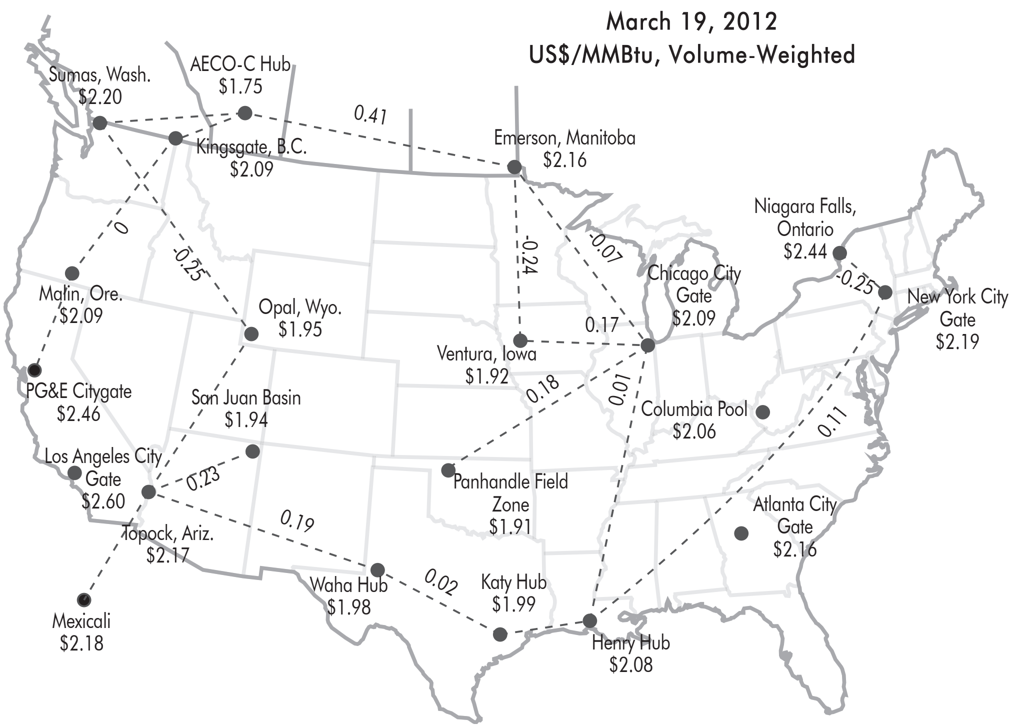
PRICES AND DIFFERENTIALS FOR MAJOR HUBS AND SELECTED CITY GATES

March 19, 2012

US$/MMBtu, Volume-Weighted



SELECTED DAILY DIFFERENTIALS

Differential	3/12	3/13	3/14	3/15	3/16
HH-NY	+0.13	+0.10	+0.09	+0.07	+0.11
HH-Chicago	+0.01	-0.08	-0.04	+0.02	+0.07
AECO-CHIC	+0.54	+0.45	+0.37	+0.36	+0.30
AECO-PG&E	+0.80	+0.80	+0.78	+0.75	+0.68

Regulations ...

(continued from page 4)

haulers to install transponders to give the state the ability to conduct "cradle to grave" monitoring of all shipments.

While companies ramp up development of the Utica Shale in Ohio, state officials said the majority of the wastewater going into injection wells is actually from Pennsylvania, where the Marcellus Shale is being developed. According to one state report, in the first three months of 2011, 1.2 million barrels of brine were shipped into the state from Pennsylvania and the state was expected to receive about 9 million barrels by the end of 2011.

In May 2011, Pennsylvania Gov. Tom Corbett issued an executive order calling for the state's 27 sewage-treatment plants to stop dumping brine from drilling operations into streams and rivers. He said the threat to the state's drinking water supply was too great. Because of that, Marcellus Shale developers began trucking their wastewater to Ohio, which has about 170 deep injection wells.

The new rules will apply to all new permits for Class II disposal wells.

John A. Sullivan, Houston

Ohio Governor's E&P Tax Proposal Offers Pros and Cons to Producers

Ohio Gov. John Kasich has rolled out a plan to reform the tax code for oil and natural gas production, largely in reaction to growing commercial activity in the state's part of the Utica Shale — a liquids-rich formation poised to become the next hot shale play.

Essentially, the plan cuts taxes for the state's established, conventional oil and gas business, while establishing a new tax structure for unconventional gas production that is indexed to commodity prices and imposes a new tax on natural gas liquids (NGLs) production (NGW Mar.12'12).

The proposal would levy a 1% tax on unconventional natural gas extraction from high-volume horizontal wells instead of the current rate of 3¢ per thousand cubic feet. At current regional gas prices of around $2.60/Mcf, this would represent a tax cut, the governor's office said. And it will not apply to conventional gas wells or marginal wells, according to the plan.

"Small natural gas wells producing less than 10 Mcf per day will no longer pay any severance taxes on natural gas production. This eliminates taxes for approximately 90 percent — 44,500 — of Ohio's conventional natural gas wells," the governor's office said in a fact sheet.

For oil and NGLs, a production tax of 1.5% would be levied in the first year of production "so the companies can recover some of their costs," Kasich said. The tax would rise to 4% thereafter. The NGL tax would not apply to conventional NGL production, however, and conventional crude production would remain taxed at the current rate of 20¢ per barrel.

The Republican governor drew attention to the fact that natural gas production or "severance" taxes would still be higher in many other energy-producing states if his proposal is approved by the state legislature, citing severance taxes of 7% in North Dakota, 7.5% in Texas and 5% in West Virginia.

"We are going to have low taxes at the end of the day on energy," he said. "Either oil and gas companies are going to come here and take it back out of state to shareholders and investors, or Ohioans are going to benefit. It's really a simple question."

The plan comes as Ohio has quickly become the center stage of exploration in the Utica Shale formation. Ohio also encompasses some of the western portions of the Marcellus Shale, along with southwestern Pennsylvania and parts of West Virginia.

Kasich said the overall increase in revenues he expects from the revised oil and gas tax code would allow the government to offset income tax cuts he has also proposed for households and small businesses.

Tom Stewart, executive vice president of the Ohio Oil and Gas Association, viewed the plan as a net tax increase that could stymie investments in the early stages of Utica development — when producers are keenly watching political risk and hoping to recoup their exploration costs.

"Ohio's current oil and gas tax structure, which was reformed only two years ago with the bi-partisan passage of Senate Bill 165, is fair, competitive with neighboring states and attractive to investment, which may total more than $34 billion in the state throughout the next several years," Stewart said. "This investment ... will benefit all Ohioans through decreased energy prices, increased tax revenue of more than $1 billion at the state and local levels and tens of thousands of new jobs. For all this, the industry asks for nothing in return.

Lauren O'Neil, Washington

NORTH AMERICAN WEEKLY GAS STORAGE

(Billion Cubic Feet)

Region	Mar. 09 Week	Mar. 02 Week	Weekly Change	Year Ago	Yr. Ago Change	5-Year Average	5-Year Change
US							
East	1059	1114	-55	697	362	700	359
West	345	352	-7	221	124	239	106
Producing	965	967	-2	700	265	607	358
Total Lower 48	**2369**	**2433**	**-64**	**1618**	**751**	**1546**	**823**
Canada							
East	132	139	-7	60	73	65	67
West	347	353	-6	145	202	127	220
Total Canada	**479**	**492**	**-13**	**204**	**275**	**192**	**287**
Total North American	2848	2925	-77	1822	1026	1738	1110

Sources: Energy Information Administration; Canadian Enerdata.

Anadarko Ready to Wring More Liquids From US Onshore Assets

During an annual meeting with investors last week, Anadarko Chief Executive Jim Hackett said the company is broadly cutting back on its dry-gas drilling in North America and redirecting capital toward projects that will yield more lucrative liquids, such as oil, condensate and natural gas liquids (NGLs).

Around 55% of the company's 2012 capital spending budget of $6.6 billion to $6.9 billion will be allocated to the US onshore this year, where Anadarko is planning active horizontal drilling programs in number of liquids-rich plays.

The Eagle Ford Shale in Texas, the Wattenberg field in Colorado, the West Texas Permian Basin and liquids-rich portions of the Greater Natural Buttes field in Utah are all slated to see robust exploration and development activity this year (NGW Feb.13'12).

Conversely, with domestic gas prices trading at 10-year lows, Anadarko said it will curtail roughly 48 million cubic feet per day in dry gas production this year and reduce the number of rigs working in the gassy Marcellus Shale play to 13 from an average of 21 in 2011.

Chief Operating Officer Al Walker summed things up, saying in a domestic market where gas is selling for around $2.50 per thousand cubic feet "you're not going to see us invest in a lot of onshore gas."

One play receiving renewed attention from Anadarko is the legacy Wattenberg oil field in Colorado, where the company plans to drill 170 wells this year (NGW Nov.21'11).

The Wattenberg field is part of a much larger position Anadarko holds in the Greater DJ Basin near the US Rockies. A number of E&P firms have been utilizing new horizontal drilling and completion techniques to test the potential of a number of geologic formations in the basin — such as the Niobrara and Codell — with varying degrees of success (NGW Aug.22'11).

Chief Financial Officer Robert Gwin said Andarko is preparing to begin a formal search for a partner to help evaluate the potential of its Greater DJ Basin position, and hinted that a data room could open in coming months. He made clear that Anadarko's Wattenberg field holdings would not be included in a joint-venture package.

Baird Equity Research analyst Michael Hall said the deal talk "likely reflects the company's desire to take risk off of the table as it works to push toward greater commerciality in this portion of the play."

And the DJ Basin is not the only place where Anadarko is eager to tap into new production zones.

In East Texas, Anadarko geologists recently determined that a portion of the company's Hayensville Shale acreage is also prospective for a liquids-rich area of the Cotton Valley Sands.

With liquids trading at several times the value of dry gas on an energy equivalent basis in the US, Anadarko is now focused on exploiting this liquids-rich formation in an area that was previously coveted for its prospectivity to the dry gas Haynesville Shale.

"We're super excited about what we're doing here," said Doug Lawler, vice president of operations. Anadarko will run six to eight rigs in the East Texas acreage in 2012.

But Anadarko's most active area of onshore US development will be the Eagle Ford Shale in south Texas, where Anadarko is planning to drill 250 wells this year and says production in yielding 65% liquids.

Hall of Baird Equity says Anadarko has "quickly become quite the shale machine."

"Anadarko has done an impressive job of building a deep inventory of shale and other unconventional projects in the Lower 48," he said.

CEO Hackett recently boasted of the company's shale success at an investor conference, saying "the shales are contributing more and more to the production profile, [and showing] much better performance than initially envisioned" (NGW Sep.19'11).

Besides shale, Anadarko is also one of the most active deepwater drillers in the US Gulf of Mexico, and executives could not be happier that exploration and drilling activity in the region is gradually returning to the levels at which it stood before the April 2010 BP oil spill disaster.

"It's great to be back in the game," said vice president of exploration Ernest Leyendecker. "The Gulf is one of the most, if not the most, prolific deepwater basins in the world."

(continued on page 7)

NATURAL GAS FUTURES

Trading Dates: March 12 - March 16

NEW YORK MERCANTILE EXCHANGE (NYMEX) (HENRY HUB)

	Monday		Tuesday		Wednesday		Thursday		Friday		Week's	Open
	Last	Volume	Last	Volume	Last	Volume	Last	Volume	Last	Volume	High-Low	Interest
Apr 2012	2.269	64,611	2.299	77,300	2.284	73,538	2.279	59,015	2.326	—	2.362-2.204	112,556
May 2012	2.373	27,319	2.408	30,551	2.416	38,460	2.420	29,237	2.436	—	2.468-2.306	64,867
Jun 2012	2.473	9,139	2.507	12,606	2.533	16,098	2.537	10,762	2.543	—	2.574-2.409	23,198
Jul 2012	2.568	9,399	2.602	12,569	2.629	11,218	2.635	8,070	2.642	—	2.668-2.507	17,580
Aug 2012	2.618	5,621	2.655	8,331	2.685	10,318	2.687	3,179	2.696	—	2.724-2.560	8,060
Sep 2012	2.638	5,654	2.677	6,630	2.708	7,498	2.714	2,803	2.724	—	2.746-2.581	6,112
Oct 2012	2.698	12,213	2.740	10,001	2.776	15,636	2.783	7,229	2.793	—	2.818-2.641	14,071
Nov 2012	2.893	4,643	2.940	2,367	2.986	3,293	3.000	1,919	3.010	—	3.043-2.840	4,464
Dec 2012	3.216	3,327	3.267	3,161	3.323	4,597	3.342	2,783	3.355	—	3.380-3.164	4,677
Jan 2013	3.353	6,044	3.404	5,134	3.461	5,645	3.478	3,801	3.490	—	3.505-3.300	7,573
Feb 2013	3.363	653	3.414	677	3.471	335	3.487	398	3.500	—	3.524-3.312	1,004
Mar 2013	3.345	1,278	3.397	1,127	3.454	887	3.468	688	3.480	—	3.493-3.297	1,461
12-MONTH STRIP	**2.817**		**2.859**		**2.894**		**2.903**		**2.916**			
TOTAL VOLUME		**116,707**		**153,139**		**173,577**		**189,258**		**—**		

Anadarko ...

(continued from page 6)

Anadarko is already off to a strong start in the Gulf this year. First production from its operated Caesar/Tonga development flowed earlier this month and the company and recently drilled a successful appraisal well at its deepwater Heidelberg discovery.

Anadarko plans to drill six to eight exploration and appraisal wells in the deepwater Gulf this year and the region is slated to receive 20% of its total exploration budget for 2012 of $1.4 billion.

“The permitting process is starting to pick up …. things are happening, rigs are busy again and we’re excited about the future in this area,” said Chuck Meloy, senior vice president of worldwide operations.

Anadarko is the second largest leaseholder in the Gulf of Mexico, with an average 63% working interest in 487 blocks

Rachael Seeley, Houston

EPA Encounters API Criticism as It Prepares New ‘Fracking’ Rules

The US Environmental Protection Agency’s plan to regulate the “fugitive” emissions resulting from the deployment of hydraulic fracturing for well stimulation has been criticized by the oil and gas industry’s top lobbying group in Washington.

The 400-member American Petroleum Institute (API) warns that the plan could stymie unconventional development in many parts of the country, while leading to an overreach of the federal government’s powers.

Specifically, the group says the EPA is trying to apply a “one size fits all” policy requiring energy firms to deploy reduced emission completions.

These so-called “green completions” are used by operators to cut the emissions of methane — the main component of natural gas, but also a potent greenhouse gas — as well as other pollutants and harmful organic compounds (NGW Sep.19’11).

The API’s comments come as the EPA prepares to issue a final completions rule in the first week of April. A draft plan was unveiled and opened for public comment in August.

The API says rules should be toned down to acknowledge that only some operators are in close proximity to the equipment and infrastructure needed for green completions.

The group also urges the EPA to allow at least two to three years for manufacturers to design and produce enough equipment needed for compliance with the EPA proposal as it is currently proposed.

Environmentalists have argued that a more widespread use of green completions will be a win-win. They say the completions would reduce emissions of methane — a potent but relatively short-lived greenhouse gas — while allowing operators to capture more gas for sale.

Howard Feldman, API’s director of regulatory affairs, countered that drillers do not need a government regulation to help them realize the benefits of capturing more gas.

Green completions are already used for many gas wells around the country. They are mandated by some state authorities in gas-producing portions of the Rocky Mountain region, particularly Colorado and Wyoming.

“Where it’s economically viable, they are already capturing methane,” Feldman told reporters in a conference call last week.

The EPA says green completions are “extremely cost-effective” and will offer “net savings to the industry” if they are required in more locations.

“EPA’s proposed standards would level the playing field to ensure that these practices and technologies will be used at wells nationwide to address a large source of harmful volatile organic compounds and toxic air emissions,” the agency says.

Lauren O’Neil, Washington

FLNG ...

(continued from page 1)

the Prelude field offshore Western Australia.

The giant vessel is approximately 488 feet long and will convert some 3 trillion cubic feet of natural gas into LNG for redelivery and sale to Shell’s portfolio customers, most likely in Asia, over the next 25 years, or until the Prelude field is depleted, whichever comes first (NGW Jun.13’11).

When that occurs, the vessel will go into a shipyard for a complete overhaul, said Harry van der Velde, manager of FLNG development. In between, the vessel’s system will be taken down for total preventative maintenance every four years.

The vessel has to be constructed for a variety of extremes and will be very “robust” to deal with a number of extraordinary

(continued on page 14)

COMPARATIVE FUEL PRICES

(Cash Market)

March 16, 2012

APPALACHIA

Appalachian Pool Dlvd (Util)	Ohio/Big Sandy River Coal
	$57.85/ton
$2.13/MMBtu	2.41/MMBtu

EAST COAST

New York City Gate	Heating Oil—No. 2*	Residual 0.30%	Residual 1.00%
	323.92¢/gal	$130.93/bbl	$118.72/bbl
$2.23/MMBtu	**$23.36/MMBtu**	**$20.83/MMBtu**	**$18.88/MMBtu**

GULF COAST

Natural Gas Texas Onshore Dlvd (Util)	Natural Gas Louisiana Onshore Dlvd (Util)
$2.12/MMBtu	$2.14/MMBtu

Heating Oil—No. 2*	Residual 0.7%	Residual 3.0%	WTI Cushing
320.57¢/gal	$119.57/bbl	$112.01/bbl	$106.20/bbl
$23.11/MMBtu	$19.02 /MMBtu	$17.82/MMBtu	$18.31/MMBtu

NOTES: (1) Residual=Residual Fuel Oil, priced exclusive of taxes; (2) WTI=West Texas Intermediate crude oil; (3) % = % of sulfur content. *Average sulfur content = 0.2%-0.5%.

SOURCES: Gas: Natural Gas Week; all prices volume-weighted. Oil: The weekly average of The Oil Daily’s cash price postings.

Broadwater Pounds Final Nail in Long Island Floating LNG Coffin

Broadwater Energy, the would-be builder of a floating LNG import terminal in the Long Island Sound, says it will not go forward "with any aspect of the LNG project" and has asked federal regulators to vacate certificates of approval granted in 2008.

The request, made by a lawyer for Broadwater's pipeline affiliate in a Mar. 7 letter to the Federal Energy Regulatory Commission, is the final nail in a coffin of a project long since dead and buried.

The project was a joint venture between Shell US Gas & Power and TransCanada. A TransCanada spokesman told local news outlets last week that the decision to discontinue the project was "based on changes in the Northeast gas supply."

Fortunately in retrospect, despite Ferc approval in 2008, then-New York Gov. David Paterson blocked the project under pressure from environmentalists predicting ecological destruction and civic groups fearing a potential explosion. Broadwater's subsequent appeal to the US Department of Commerce failed (NGW Apr.20,'09) .

Broadwater, first announced in 2004, had been one of three competing projects looking to capitalize on a gas-supply shortage predicted by 2010 for the Northeast and particularly New York City and its suburbs.

The other two — Exxon Mobil's floating 1.2 billion cubic feet per day BlueOcean project and the 2 Bcf/d Safe Harbor Energy terminal — were to have been located far offshore New Jersey. Both projects were suspended in 2010.

The growth of the Marcellus Shale and other plays has put downward pressure on US prices, substantially reducing the number of LNG cargoes arriving at Northeast import terminals in New England and Maryland and reducing total LNG sendout in the Northeast by 60% from 2007-11, said Jennifer Robinson, a senior gas analyst at Bentek Energy.

LNG NETBACKS TO US & EUROPEAN TERMINALS

March 2012

US$/MMBtu

	Trinidad	Algeria	Qatar	Nigeria	Oman
US					
Lake Charles	0.74	0.11	-1.58	-0.19	-1.69
Elba Island	0.86	0.37	-1.03	-0.01	-1.50
Cove Point	1.15	0.75	-0.66	0.36	-1.23
Everett	1.20	0.94	-0.46	0.50	-1.08
EUROPE					
Belgium/Zeebrugge	7.09	7.61	6.24	6.96	5.34
Spain/Huelva	9.14	9.97	8.34	9.07	7.44

Source: World Gas Intelligence. Base price used in calculating US netbacks is three-day average of front-month Nymex Henry Hub closing price. Location adjustments based on Natural Gas Week spot price assessments for Trunkline West Louisiana (Lake Charles); Transco Zone 6-Non-NY (Cove Point); Transco Zone 5 (Elba Island); and Boston City Gate (Everett). Regas charged as 10% of base price in US. Zeebrugge includes regas charge of 1 eurocent/cubic meter applied to base price, calculated as first or second month IPE price for the UK National Balancing Point, adjusted for historic differentials. Spanish prices are based on ex-ship price estimates.

Now a handful of US terminal operators have applied for permits to reverse their flows to begin exporting some of the cheap shale gas. Cheniere Energy's Sabine Pass liquefaction project in Louisiana is furthest ahead in the process, waiting on final construction approval from Ferc, which was initially expected tin February.

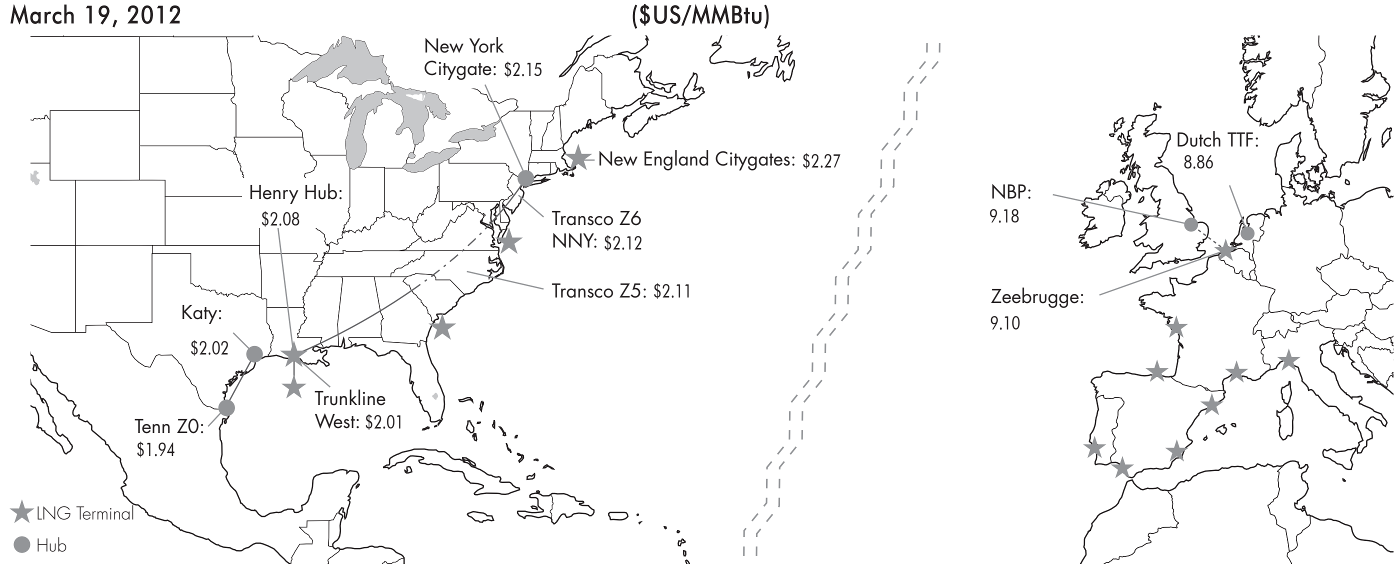
Cheniere sent a letter to Ferc Chairman Jon Wellinghoff on Mar.7 requesting the agency issue a final order approving the liquefaction project by Mar.15, adding that failure to do so would result in "significant price increases ... which in turn may result in delays in the construction of the liquefaction project." Cheniere's "deadline" passed without Ferc issuing an approval.

Matt Zeidel, New York and Alex Benedetto, Washington

PRICES FOR MAJOR ATLANTIC BASIN LNG HUBS

March 19, 2012

($US/MMBtu)



*European gas prices are four-week spot averages from *World Gas Intelligence*. US gas prices are *Natural Gas Week's* volume-weighted composites from delivery first day of month through most current delivery date. New York Citygate is a weighted composite of Transco Z6 NY and Iroquois Z2. New England Citygates is a weighted composite of Algonquin and Tennessee Z6.

Report Looks at Infrastructure Needs of Offshore Wind

Planning for offshore wind power is now moving from the turbines to the infrastructure needed to tie the power output into the onshore grid.

A study done at Dominion Virginia Power's request recommends one offshore substation platform with two 230,000-volt power lines is appropriate to transmit to shore every 500 MW to 700 MW of wind-generated electricity constructed off the coast of Virginia.

The report, completed by ABB Power Systems Consulting, estimated the cost for each offshore service platform, its equipment and submarine transmission cables at about $652 million.

The ABB report also evaluated the offshore transmission options to support future projects and built its recommendations on the company's first study in 2010 that looked at potential on-shore interconnection options and upgrades needed to support offshore wind generation projects.

"As public policy is developed to support wind farms off Virginia's coast and leases are issued, Dominion will continue evaluating transmission options to ensure the identification of the lowest-cost alternative for bringing offshore wind electricity to customers," said Scot Hathaway, vice president-Electric Transmission. "It is important that we continue to understand these costs and work to reduce them as we consider the possibility of offshore wind generation."

Dominion has a $500,000 grant from the US Department of Energy to work with the energy industry to find ways to reduce the costs of offshore wind generation. The DOE estimates that offshore wind generation alone would cost about 24¢ per kilowatt-hour; Dominion's residential rates for generation, transmission and distribution services are about 11¢ per kilowatt-hour.

Dominion is planning to respond to the federal Bureau of Ocean Energy Management's call for information for wind generation on about 113,000 acres of leasing areas 24 miles off the Virginia coast. The leasing area set by BOEM is divided into 19 whole blocks of nine square miles and 13 partial ones.

While ramping up its offshore plans, Dominion is also busy with onshore projects. In late February, the company announced plans to invest more than $1 billion to develop a 1,300-MW natural gas-fired power station in Brunswick County, Virginia, to replace coal units that are scheduled to be retired. The company expects to have the plant operational by the summer of 2016.

In addition to areas off the Virginia coast, the BOEM has also identified wind energy areas off the coast of Rhode Island and Massachusetts in an area of mutual interest to both states.

Earlier this month, BOEM, working with the Commonwealth of Massachusetts, published a Call for Information and Nominations to identify locations within an offshore area in which there is industry interest to seek commercial leases for developing wind projects.

The area under consideration begins 12 nautical miles south of Martha's Vineyard and 13 nautical miles southwest of Nantucket. The area is 826,241 acres and contains 132 whole OCS lease blocks as well as 19 partial blocks.

The DOE has said that the East and West coasts, the Gulf of Mexico and the Great Lakes have a wind power potential of up to 4,000 GW.

* * *

Saving energy: A new poll by Harris Interactive shows Americans are taking steps to conserve energy at home. The poll of 2,056 adults was taken Feb. 6-13.

According to the poll: 82% said they were turning off lights, televisions or other appliances when not in use; 58% are replacing incandescent bulbs with fluorescent ones; 56% are using power strips; 55% are looking for ENERGY STAR labels when replacing appliances; and 54% said they are using low watt bulbs.

There were regional differences noted in the poll. The survey showed that over half of southerners (55%) change their air filters monthly in comparison to just 27% of easterners and 28% of westerners. Three in five westerners (59%) use low wattage light bulbs compared to just 48% of easterners and, two in five of those living in the West (40%) have installed low-flow faucets compared to just 25% of those in the East and 23% in the Midwest.

* * *

Pump fixed: US Geothermal's contractor has successfully repaired a pump at the 8.6- MW San Emidio, Nevada, geothermal power plant. The contract began commissioning operations Friday and the first roll of the turbine is expected Mar. 23. Besides the site in Nevada, US Geothermal has projects in Raft River, Idaho and Neal Hot Springs, Oregon.

* * *

Thin wafers: Twin Creeks Technologies has unveiled Hyperion: a wafer production system that reduces the cost of solar modules and semiconductor devices by reducing the amount of silicon and other substrate materials by up to 90%. Hyperion is able to produce wafers less than 1/10th the thickness of conventional wafers used in solar power.

John A. Sullivan, Houston

SPOT ELECTRICITY TRADING

Trading Dates: March 12-March 16, 2012

NEW YORK MERCANTILE EXCHANGE (NYMEX) (HENRY HUB)

POINT	Avg. Price This Week	Avg. Price Last Week	Change	Year Ago	Month Ago
Cinergy	$28.00	$28.30	-$0.30	$38.38	$28.50
COB	—	—	—	—	—
Comed	—	—	—	—	—
Entergy	—	—	—	—	—
ERCOT	25.70	25.00	0.70	37.38	22.33
Into TVA	—	—	—	—	—
Mid-Columbia	18.20	20.10	-1.90	24.25	23.50
NEPOOL	24.30	31.80	-7.50	54.00	31.83
Palo Verde	22.50	22.30	0.20	27.38	25.00
PJM-West	31.90	32.90	-1.00	47.63	31.00

Notes: (1) Prices in $/MWh. (2) Prices are for next day peak delivery. Sources: Staff and wire reports.

Chesapeake Spearheads Midstream Development in Ohio's Utica Play

US gas giant Chesapeake Energy is partnering with M3 Midstream and EV Energy Partners to build what it claims will be the largest integrated midstream service complex in eastern Ohio at an estimated price tag of $900 million.

The complex will provide the infrastructure needed to process growing natural gas and natural gas liquids (NGLs) production from the burgeoning Utica Shale play.

It will consist of natural gas gathering and compression facilities constructed and operated by Chesapeake's subsidiary Chesapeake Midstream Development, as well as processing, NGL fractionation, loading and terminal facilities constructed and operated by M3 Midstream.

The venture will provide EV Energy and Chesapeake with the infrastructure needed to process and transport growing production, and build on M3 Midstream's midstream holdings in neighboring Pennsylvania and West Virginia.

Chesapeake holds more than 400,000 net acres in the Utica Shale, where it has drilled 42 wells, of which seven are on production and 35 are awaiting completion or pipeline connection. The company plans to have 20 rigs working in the play by year-end 2012, up from eight currently. Chesapeake will own 59% of the new midstream partnership, followed by M3 Midstream (33%) and EV Energy (8%) Chesapeake's joint-venture partner Total has the option of taking a 15% interest in the venture.

The first cryogenic processing and fractionation plants are to be in service by the second quarter of 2013.

In other North American shale news:

Officials with the US Environmental Protection Agency report that water tested at 11 homes in Dimrock, Pennsylvania, "did not show levels of contamination that could present a health concern." Dimrock has been at the center of the hydraulic fracturing debate with some claiming that drilling in the Marcellus Shale has damaged or contaminated the area aquifer. Several residents of the town are suing Houston-based Cabot Oil & Gas over claims that the company has polluted the area's water supply.

* * *

The Colorado Oil and Gas Conservation Commission is investigating the dumping of radioactive sand — a waste product of hydraulic fracturing — at a non-permitted pit operated by EOG Resources in Weld County. Sand used in fracking operations often becomes mildly radioactive after coming in contact with naturally occurring radioactive elements.

The state agency said the dumping occurred Mar. 8 and it is reviewing whether a permit is required for that particular pit. EOG saidthe radioactive sand will be taken to an approved disposal site, but added that the low radiation levels posed no threat to employees or the public.

Infrastructure Update:

CPS Energy expects to close the purchase of an 800-MW natural-gas-fired power plant in Sequin, Texas, by the end of April. The 10-year-old Rio Nogales power plant will replace two coal-fired units at its 870-MW J.T. Deely plant that the utility is planning to retire by 2018.

* * *

A Foster Wheeler AG subsidiary has been awarded the basic design and front-end engineering design contract by Complejo GNL del Este for an LNG receiving terminal and jetty to be built in San Pedro de Marcorís in the Dominican Republic. The terminal will have a send-out capacity of 240 million cubic feet per day (MMscf/d) with future expansions of up to 700 MMscf/d possible.

* * *

Helix Energy Solutions Group has signed a contract with Jurong Shipyard in Singapore for the construction of a new-build semisubmersible well intervention vessel.

Mergers & Acquisitions:

In a move to get federal regulatory approval for its acquisition of El Paso, Kinder Morgan will sell some of its Rocky Mountain pipeline assets.

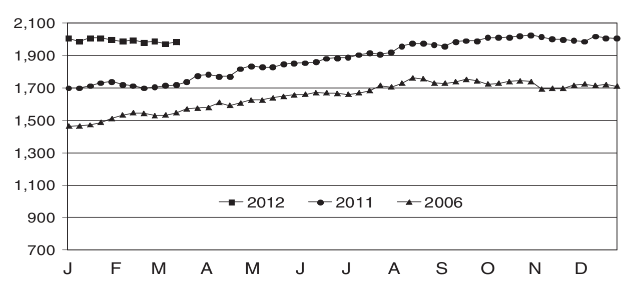
The Federal Trade Commission has given a tentative OK for the $23.8 billion merger that would create the nation's largest natural gas pipeline operator after Kinder Morgan agreed to sell its 50% interest in the Rockies Express Pipeline, along with its Kinder Morgan Interstate Gas

(continued on page <None>)

BAKER HUGHES RIG COUNT

Week Ended Mar. 16

Rotary Rigs	Current Week	Previous Week	Year Ago
Total US	1,984	1,973	1,720
Land	1,920	1,914	1,677
Inland Waters	21	18	18
Offshore	43	41	25
Gulf of Mexico	43	41	25
Total Canada	517	655	586
US Rigs Exploring for:			
Oil	1,317	1,296	839
Gas	663	670	875
Unspecified	4	7	6
US Rigs by State:			
Arkansas	27	29	32
California	44	44	41
Colorado	67	63	66
Louisiana	131	137	168
New Mexico	81	81	78
North Dakota	197	196	153
Oklahoma	207	195	159
Pennsylvania	101	101	103
Texas	926	929	754
West Virginia	28	28	16
Wyoming	44	45	48



Source: Baker Hughes

(continued from page 10)
Transmission, Trailblazer Pipeline, Casper-Douglas natural gas processing and West Frenchie Draw treating facilities.

* * *

Atlas Resource Partners will buy Barnett Shale property from Carrizo Oil & Gas for $190 million. Houston-based Carrizo said the properties are producing about 36 million cubic feet equivalent per day of mostly dry gas.

Legal & Legislative:

PG&E will pay $70 million to the city of San Bruno, California, to settle claims arising from a natural gas pipeline blast on Sep. 9, 2010, that killed four people, injured another 50 and destroyed 37 homes. PG&E said the settlement is in addition to funds it has promised for the replacement and repair of city infrastructure and other costs related to the accident.

* * *

The New York State Assembly is considering financing an independent health impact study on the impact of hydraulic fracturing. A proposed bill would set aside $100,000 for a study to be carried out by research teams from state universities.

Macondo Aftermath:

The seven members of President Obama's National Oil Spill Commission, including Natural Resources Defense Council President Frances Beinecke, have formed an organization to monitor progress in implementing the commission's safety recommendations made in January 2011. The newly created "Oil Spill Commission Action" plans to issue its first report card on Congress, the administration and industry around the second anniversary of the spill in April.

Also Noted:

Chairman dies: Murphy Oil has reported the death of Chairman of the Board William C. Nolan Jr., 72.

* * *

Officers picked: Resolute Energy has named Theodore Gazulis chief financial officer and Richard F. Betz chief operating officer.

* * *

Offices relocated: Pacific Gas & Electric is relocating the majority of its gas operations to San Ramon, California.

GAS PRICE TRENDS

($/MMBtu)

	CALIFORNIA		ROCKY MTNS	NEW MEXICO	TEXAS				MID-CONT.	LOUISIANA			MID-WEST	APPA-LACHIA	SOUTH-EAST	NEW ENG.
	South	North			Gulf Coast Offshore	Gulf Coast Onshore	Central	West		Gulf Coast Offshore	Gulf Coast Onshore	Northern Louisiana				
Mar 19, 2012																
Inter (Well)	—	—	1.82	1.77	1.90	1.89	—	1.87	1.82	1.95	1.96	1.95	—	1.94	1.91	—
Intra (Well)	2.15	—	1.79	—	1.91	1.91	—	1.87	1.80	1.95	1.96	1.94	—	—	—	—
Dlvd (Pipe)	2.17	2.36	1.94	1.94	1.97	1.97	—	1.94	1.92	2.02	2.03	2.02	2.07	2.05	2.06	2.23
Dlvd (Util)	2.17	2.32	2.27	2.09	—	2.12	—	2.02	2.17	—	2.14	2.16	2.09	2.13	2.51	2.29
Mar 12, 2012																
Inter (Well)	—	—	1.97	1.96	2.10	2.10	2.16	2.09	2.05	2.13	2.14	2.11	—	2.16	2.10	—
Intra (Well)	2.26	—	1.94	—	2.11	2.12	2.16	2.09	2.03	2.13	2.14	2.10	—	—	—	—
Dlvd (Pipe)	2.28	2.40	2.09	2.13	2.17	2.18	2.25	2.16	2.15	2.20	2.21	2.18	2.26	2.27	2.25	2.72
Dlvd (Util)	2.28	2.37	2.42	2.28	—	2.33	2.42	2.24	2.40	—	2.32	2.32	2.28	2.35	2.69	3.15
Mar 05, 2012																
Inter (Well)	—	—	2.17	2.17	2.27	2.27	2.30	2.26	2.24	2.32	2.32	2.27	—	2.34	2.27	—
Intra (Well)	2.47	—	2.14	—	2.28	2.29	2.30	2.26	2.22	2.32	2.32	2.26	—	—	—	—
Dlvd (Pipe)	2.49	2.55	2.29	2.34	2.34	2.35	2.39	2.33	2.34	2.39	2.39	2.34	2.47	2.45	2.42	3.06
Dlvd (Util)	2.49	2.54	2.62	2.49	—	2.50	2.56	2.41	2.59	—	2.50	2.48	2.49	2.53	2.87	3.80
February 2012																
Inter (Well)	—	—	2.40	2.32	2.38	2.41	2.41	2.41	2.38	2.43	2.46	2.41	—	2.50	2.39	—
Intra (Well)	2.72	—	2.37	—	2.39	2.43	2.41	2.41	2.36	2.43	2.46	2.40	—	—	—	—
Dlvd (Pipe)	2.74	2.71	2.52	2.49	2.45	2.49	2.50	2.48	2.48	2.50	2.53	2.48	2.66	2.61	2.54	3.32
Dlvd (Util)	2.74	2.71	2.85	2.64	—	2.64	2.67	2.56	2.73	—	2.64	2.62	2.68	2.69	2.99	3.68
January 2012																
Inter (Well)	—	—	2.55	2.45	2.62	2.56	2.63	2.51	2.57	2.58	2.60	2.59	—	2.58	2.54	—
Intra (Well)	2.91	—	2.52	—	2.63	2.58	2.63	2.51	2.55	2.58	2.60	2.58	—	—	—	—
Dlvd (Pipe)	2.93	3.01	2.67	2.62	2.69	2.64	2.72	2.58	2.67	2.65	2.67	2.66	2.78	2.69	2.69	4.70
Dlvd (Util)	2.93	2.99	3.00	2.77	—	2.79	2.89	2.66	2.92	—	2.78	2.80	2.77	2.77	3.18	5.39
Fourth Quarter 2011																
Inter (Well)	—	—	3.11	3.01	3.21	3.15	3.19	3.10	3.12	3.16	3.23	3.21	—	3.27	3.12	—
Intra (Well)	3.46	—	3.08	—	3.22	3.17	3.19	3.10	3.10	3.16	3.23	3.20	—	—	—	—
Dlvd (Pipe)	3.48	3.56	3.23	3.18	3.28	3.23	3.28	3.17	3.22	3.23	3.30	3.28	3.44	3.38	3.27	3.73
Dlvd (Util)	3.48	3.54	3.56	3.33	—	3.38	3.45	3.25	3.47	—	3.41	3.42	3.44	3.46	3.77	4.02
2011 Average																
Inter (Well)	—	—	3.49	3.52	3.82	3.75	3.91	3.63	3.64	3.68	3.84	3.81	—	3.88	3.73	—
Intra (Well)	3.91	—	3.46	—	3.83	3.77	3.91	3.63	3.62	3.68	3.84	3.80	—	—	—	—
Dlvd (Pipe)	3.93	3.95	3.61	3.69	3.89	3.83	4.00	3.70	3.74	3.75	3.91	3.88	3.87	3.99	3.88	4.67
Dlvd (Util)	3.93	3.95	3.94	3.84	—	3.98	4.17	3.78	3.99	—	4.02	4.02	3.87	4.07	4.29	4.65
March 2011																
Inter (Well)	—	—	3.64	3.59	3.83	3.79	3.65	3.77	3.81	3.80	3.87	3.83	—	4.03	3.84	—
Intra (Well)	3.88	—	3.61	—	3.84	3.81	3.65	3.77	3.79	3.80	3.87	3.82	—	—	—	—
Dlvd (Pipe)	3.90	4.09	3.76	3.76	3.90	3.87	3.74	3.84	3.91	3.87	3.94	3.90	4.10	4.14	3.99	4.71
Dlvd (Util)	3.90	4.07	4.09	3.91	—	4.02	3.91	3.92	4.16	—	4.05	4.04	4.10	4.22	4.45	5.00

NOTES: (1) Inter = Interstate Intra = Intrastate Well = Wellhead Dlvd = Delivered Pipe = Pipeline Util = Utility (2) This table presents historical data from the Gas Price Report. (3) R = Revised. (4) Mid-Cont. = Mid-Continent New Eng. = New England (5) Since Jan. 3, 1994, California prices have been divided into North to reflect gas delivered from Pacific Gas Transmission Co. to northern California and South to reflect gas delivered to southern California via the Transwestern Pipeline Co., El Paso Natural Gas Co. and Kern River Gas Transmission pipeline systems. Previous reporting for the state concentrated on southern California; thus, the historical prices in the South column properly reflect trading for southern California. Natural Gas Week has no similar history of prices for northern California. (6) All prices are volume-weighted.

Sasol to Bide Its Time Undertaking BC GTL Project

South Africa's Sasol, the world's largest producer of motor fuels from coal, announced last week it is mothballing plans to produce natural gas from shale in British Columbia because of low gas prices.

"Our development plan for 2012 has been curtailed to respond to the current low gas prices, but this allows for further appraisal," Chief Executive Officer David Constable said.

Ironically, Sasol had earlier touted low gas prices as a major reason for investing in Western Canada — and paying a premium for the assets it bought from Calgary-based Talisman as part of its plans. Low gas prices are exactly what a gas to liquids (GTL) project requires since low feedstock costs and high oil-related product prices yield strong margins and profits, a company spokesman said last year.

Sasol picked up half of Talisman Energy's Cypress A and Farrell Creek operations in the Montney shale basin last year with plans to capitalize on a gas-based fuel production strategy while looking into the possibility of building North America's first GTL plant (NGW Jan.3'11).

"Our assessment of the gas reserves in Montney remains intact," Constable said. "The medium- and long-term ramp-up profile will be fully aligned to feed our GTL aspirations."

Talisman and Sasol have been discussing plans for a joint venture to develop two GTL trains of 48,000 barrels per day each — almost three times the size of the existing Sasol-operated Oryx GTL project in Qatar.

Talisman is trying to find a market for trillions of cubic feet of natural gas trapped in the Montney shale play. The company could have opted for LNG as several others have and joined one of the three LNG export ventures proposed for British Columbia's West Coast. Instead, Talisman elected to combine an unconventional technology with unconventional gas resources in two deals with Sasol. Until they decided to put a brake on their plans, Sasol had said it would spend C$2.1 billion (US$2.1 billion) (NGW Apr.25'11).

Talisman Energy is one of the larger Montney players, with 211,000 net acres in the Greater Groundbirch, Farrell Creek and Greater Cypress areas. Portions of the latter two are held in joint venture with Sasol, where gas resources may eventually provide the feedstock for the GTL complex.

According to the Canadian Society for Unconventional Resources (CSUR), the basin contains 500 trillion cubic feet of gas in place. Between 10% and 20% are recoverable with existing technology, CSUR says. Another study by the British Columbia Ministry of Mines and Energy and Canada's National Energy Board puts recoverable reserves at 78 Tcf.

As companies such as Sasol hold their fire with GTL plans, the LNG option continues to attract interest.

As Japan marks the one-year anniversary of the devastating earthquake that crippled the Fukushima Daiichi nuclear power plant, Japanese companies are looking to natural gas-fired generation and Canadian natural gas as a potential replacement for nuclear power.

Japan currently imports a substantial amount of coal from Canada, but most of the country's natural gas exports go south through pipelines to the US — a declining market thanks to the shale revolution south of the Canadian border.

With increasing consideration of a pipeline to the West Coast and the creation of LNG export terminals, Japan could begin to rely on Canada to supplement its current natural gas power plants, which account for around 30% of the country's capacity.

"Of course we should also think of the cost of importing LNG and other resources and how to diversify the countries from which we buy those energy [products]," Kaoru Ishikawa, Japan's ambassador to Canada, told the *Globe and Mail* in a recent interview. "We are already importing uranium, coal, and then why not LNG? LNG would be very important for us."

Last month, Calgary-based Encana announced a deal with Japan's Mitsubishi for a joint venture covering a portion of its Cutbank Ridge properties in British Columbia's unconventional gas play (NGW Feb.27'12). The $2.9 billion transaction gives Mitsubishi a 40% stake in the Cutbank Ridge Partnership, with Encana holding the remainder as operator.

Mitsubishi earlier pledged $4.3 billion over 15 years to Penn West Energy to develop shale gas assets in northeastern British Columbia. The Japanese firm has been clear that its purpose is to find natural gas supplies it can convert into LNG for shipment to Japan.

Mitsubishi is a minority partner in the 2 billion cubic feet per day Royal Dutch Shell-led LNG project planned for Kitimat, British Columbia, along with state PetroChina and state Korea Gas. Encana has a 30% stake in another LNG venture, Kitimat LNG, along with Apache and EOG Resources.

* * *

Rig count: There were 503 rigs drilling for natural gas and oil in Western Canada as of Mar. 13, 95 fewer than reported for the previous week by the Canadian Association of Oilwell Drilling Contractors (CAODC).

During the same period a year ago, CAODC reported that 560 rigs were drilling in the region.

A total of 797 rigs are available in the region, one more than in CAODC's previous report.

* * *

Working gas in all Canadian storage facilities were reported to be 67.6% of capacity as of Mar. 9 with a 12.7 billion cubic foot withdrawal from the week before, according to the most recent Canadian Enerdata gas storage survey.

A total of 478.9 Bcf of gas was in storage last week; capacity is 708.8 Bcf. Stores were 28.3% full a year ago.

Working gas levels in facilities west of the Manitoba-Saskatchewan border fell to 346.8 Bcf, down from 352.5 Bcf the week before; capacity is 453.1 Bcf.

Working gas levels east of the border fell to 132.1 Bcf, down from 139.1 Bcf the week before; capacity is 255.7 Bcf.

* * *

The composite spot import price this week is US$2.19/MMBtu for gas leaving Canada and entering the US through six border-crossing points.

Natural Gas Week's Mar. 21, 2011, average for Canadian exports was US$4.06/MMBtu.

Canada's average spot wellhead price is US$1.76/MMBtu; the price for the same week a year ago was US$3.61/MMBtu.

James Irwin, Toronto

Chevron Looks to Australian LNG To Reach Ambitious Growth Target

Chevron's goal for a 20% increase over its projected 2012 output will largely be driven by the start-up of the company's LNG megaprojects in Western Australia.

LNG output is projected to more than double by 2017 with the start-up of the Gorgon and Wheatstone megaprojects, along with the smaller Angola LNG liquefaction plant that is slated to start production later this year.

The 15 million ton per year Gorgon LNG project will cost a whopping $43 billion, while the 8.9 million ton/yr Wheatstone LNG carries a price tag of $29 billion — assuming cost inflation doesn't push those figures higher.

In September, Chevron sanctioned the construction of Wheatstone and awarded more than $13 billion in contracts, with first LNG production due in 2016. Construction at Gorgon is 40% complete and first LNG is scheduled for 2014.

Turkey Follows Noble Offshore Cyprus

Turkish state TPAO is set to begin drilling for oil and natural gas off the coast of northern Cyprus. TPAO President Mehmet Uysal said it will be drilling in an area that has boundaries overlapping those claimed by southern Cyprus.

Noble Energy scored big last year at the Aphrodite gas discovery in Block 12 off Cyprus, finding 7 trillion cubic feet of gas (NGW Jan.2'12). In February Cyprus launched its much-anticipated second licensing round with most interest expected to be focused on acreage close to the maritime boundaries with Israel and Lebanon.

However, any gas discoveries in this area complicates negotiations over reunification of the island and possibly increases tensions in the eastern Mediterranean.

EU-member Cyprus, run by a Greek Cypriot government, started exploring for gas south of the island in September 2011, angering Turkey, which acts as the protector of the Turkish Cypriot enclave in the north.

CANADIAN PRICE REPORT

($U.S. per MMBtu/$Can per Gigajoule)

	BRITISH COLUMBIA			ALBERTA			SASKATCHEWAN		MANITOBA	ONTARIO	
	Total Province	Huntingdon/ Sumas Border	Kingsgate/ Eastport Border	Total Province	AECO-C* Hub	Empress Border	Total Province	Monchy Border	Emerson Border	Toronto City Gate	Niagara Border
	Spot	Spot	Spot	Spot	Spot	Spot	Spot	Spot	Spot	Spot	Spot
MARCH 19, 2012											
Wellhead U.S. $	2.00	—	—	1.55	—	—	1.55	—	—	—	—
Canadian $	1.99	—	—	1.53	—	—	1.53	—	—	—	—
Delivered to Pipe U.S.$	2.14	2.20	2.09	1.69	1.75	1.31	1.69	1.71	2.16	2.51	2.44
Canadian $	2.13	2.18	2.07	1.67	1.74	1.30	1.67	1.69	2.15	2.49	2.42
MARCH 12, 2012											
Wellhead U.S. $	1.96	—	—	1.56	—	—	1.56	—	—	—	—
Canadian $	1.95	—	—	1.55	—	—	1.55	—	—	—	—
Delivered to Pipe U.S.$	2.10	2.15	2.06	1.70	1.67	1.41	1.70	1.95	2.29	2.62	2.76
Canadian $	2.09	2.14	2.05	1.69	1.66	1.41	1.69	1.94	2.28	2.61	2.75
MARCH 5, 2012											
Wellhead U.S. $	2.24	—	—	1.71	—	—	1.71	—	—	—	—
Canadian $	2.21	—	—	1.70	—	—	1.70	—	—	—	—
Delivered to Pipe U.S.$	2.38	2.46	2.29	1.85	1.84	1.68	1.85	2.11	2.51	2.83	2.89
Canadian $	2.35	2.44	2.27	1.84	1.82	1.67	1.84	2.09	2.49	2.80	2.86
FEBRUARY 2012 AVERAGE											
Wellhead U.S. $	2.43	—	—	1.90	—	—	1.90	—	—	—	—
Canadian $	2.42	—	—	1.90	—	—	1.90	—	—	—	—
Delivered to Pipe U.S.$	2.57	2.65	2.49	2.04	2.08	1.94	2.04	2.18	2.76	2.97	3.00
Canadian $	2.56	2.64	2.48	2.04	2.07	1.93	2.04	2.17	2.75	2.97	2.99
JANUARY 2012 AVERAGE											
Wellhead U.S. $	2.54	—	—	2.16	—	—	2.16	—	—	—	—
Canadian $	2.58	—	—	2.19	—	—	2.19	—	—	—	—
Delivered to Pipe U.S.$	2.68	2.89	2.47	2.30	2.37	2.03	2.30	2.34	2.93	3.08	3.23
Canadian $	2.72	2.93	2.50	2.33	2.40	2.06	2.33	2.37	2.97	3.13	3.27
4TH QUARTER 2011 AVERAGE											
Wellhead U.S. $	3.27	—	—	2.82	—	—	2.82	—	—	—	—
Canadian $	3.35	—	—	2.89	—	—	2.89	—	—	—	—
Delivered to Pipe U.S.$	3.41	3.49	3.33	2.96	2.92	2.54	2.96	2.98	3.42	3.80	3.79
Canadian $	3.49	3.57	3.41	3.03	2.98	2.60	3.03	3.05	3.50	3.88	3.88
2011 AVERAGE											
Wellhead U.S. $	3.64	—	—	3.33	—	—	3.33	—	—	—	—
Canadian $	3.60	—	—	3.29	—	—	3.29	—	—	—	—
Delivered to Pipe U.S.$	3.78	3.80	3.76	3.47	3.19	3.19	3.47	3.58	3.79	4.18	4.38
Canadian $	3.74	3.76	3.72	3.43	3.16	3.16	3.43	3.54	3.75	4.14	4.33
MARCH 2011 AVERAGE											
Wellhead U.S. $	3.72	—	—	3.50	—	—	3.50	—	—	—	—
Canadian $	3.63	—	—	3.42	—	—	3.42	—	—	—	—
Delivered to Pipe U.S.$	3.86	3.81	3.91	3.64	3.58	3.39	3.64	3.53	4.08	4.45	4.66
Canadian $	3.77	3.72	3.82	3.56	3.49	3.31	3.56	3.45	3.98	4.34	4.55

NOTES: Prices represent volume-weighted averages of the most recently reported gas sales contracts and price negotiations. *Denotes pricing at Alberta Energy Co.'s marketing hub in southeastern Alberta. R=Revised.

FLNG ...

(continued from page 7)

events, no matter how rare, the Shell executives explained. Weather is one. Although conditions generally are quite benign in the waters off Australia's northwest coast, the area occasionally is plagued by its version of hurricanes, Van Loon said, recalling her tour of duty in the region.

Rough waters that could cause LNG to slosh in partially filled tanks, causing the vessel to move to and fro are another concern, van der Velde said. This requires extra stabilization measures.

Some of these issues are addressed through the vessel's massive turret and mooring system. Although many parts of an FLNG vessel will be common to every unit constructed, the turret and mooring system will be unique to each one to address the unique depth, water and seabed conditions at each location.

Even the accommodations facilities are designed for extremes, van der Velde said. Ordinarily, a crew of about 110 maintains the LNG operations. Every four years, however, when the units are taken down for complete maintenance, extra maintenance workers brought on board bring the population up to 400. Hence, the need for extra housing and service facilities.

The Prelude FLNG vessel will use a version of the Shell double-mixed refrigerant liquefaction process that has been so successful at the Sakhalin LNG project in the Russian Far East, Van Loon said. The difference is that instead of using frigid air found at Sakhalin as a cooling agent, Prelude will use cold sea water, available even in the tropics offshore Australia.

In both cases, use of natural sources reduces their respective projects' carbon footprints and cuts operating costs.

Shell has not released cost estimates for FLNG vessels, but Van Loon insisted that they are competitive with new build onshore facilities of comparable size when support infrastructure, such as long-distance pipelines, are included.

Crew safety was a major concern in the design of the vessel and its various process units, van der Velde explained. The most dangerous units that separate natural gas liquids (NGLs) from the raw gas stream and then fractionate the NGLs into their component products are the most distant from crew accommodations. Closest is the power generation plant, a relatively safe unit. The LNG and NGLs storage tanks are located in the vessel's hull.

The Prelude vessel will carry a 3.6 million tons per year LNG plant, but the generic design for the "design one, build many" that Shell hopes to apply to the series of future vessels calls for a 6 million tons/yr unit, Van Loon said. Prelude also will have a 1.7 million tons/yr capacity for NGLs and condensates. The liquids capacity of a given vessel will vary with the initial target field.

Shell plans two more FLNG projects after Prelude, Sunrise and Abadi. Unlike in Prelude, Shell will have partners in the next two ventures. Woodside will be the operator in Sunrise, but the company and third partner ConocoPhillips both agree that Shell's FLNG technology is the best means of monetizing the gas now stranded offshore East Timor.

Abadi was a project of Japan's Inpex before Shell took a stake in the Indonesian field. Inpex will retain operatorship of the project.

Barbara Shook, Riswijk, The Netherlands.

Decline ...

(continued from page 1)

their lowest levels in 10 years — near $2.30 per thousand cubic feet (p3).

Barclays Capital analysts Sudakshina Unnikrishnan and Kate Tang shared their thoughts on the development in a recent commodities research note.

"Although the gas rig count has fallen below 700; our sense is that the rig count has not dropped fast enough and early enough to stage a supply pullback this year," Unnikrishnan and Tang wrote earlier this month.

The associated gas being produced from new oil wells is feeding into an already oversupplied North American gas market. Working gas in storage is currently running 51.7% above its five-year average, at 2,369 billion cubic feet and an extraordinarily mild late-winter has dampened hopes working off the glut before the withdrawal season ends.

Barclays notes the record amounts of working gas in US storage leaves less room for injections in the coming season.

Though US gas production declined 3% in December versus November, data from the US Energy Information Administration shows that gas production of 82.5 Bcf was still significantly higher than the 77.2 Bcf/d produced in December 2010.

Meanwhile, the growth in oil-directed drilling has more than offset the decline in gas-directed rigs and propelled the overall US rig count to levels just shy of its August 2008 peak of 2,031 rigs — albeit with a much different makeup.

In August 2008, 79% of the rigs working in the US were searching for natural gas, compared to just over 30% of US rigs last week, data from oilfield services company Baker Hughes shows.

By dissecting rig count data more closely it is evident that reductions are materializing in areas that are rich in dry gas and but lacking in liquids.

The number of rigs working in the Haynesville Shale for instance is about 40% lower than it was in the first quarter of 2010, according to information compiled by Tudor Pickering and RigData.

The same data shows that drilling activity is picking up in the legacy oil fields of West Texas and New Mexico and in the liquids-rich areas of Eagle Ford shale.

The number of rigs working in the Eagle Ford shale has risen 66% from its average in the first quarter of 2010, to 222 rigs, while the number of rigs working in West Texas and New Mexico has increased 25% to 461 rigs.

A recent survey of 31 US gas producers and midstream companies by Barclays Capital found no companies that were bullish about natural gas in the near term, but that producers were not as glum as one might expect.

The main conclusion reached was that producers are set to keep doing what they do best: drill.

"More producers are pointing their rigs at liquids-rich and oil targets, if they have them. If not, dry-gas drilling must suffice in order to deliver the production growth that is still mandated by investors," Unnikrishnan and Tang wrote.

"Expect to be surprised by how quickly independents can grow liquids and shale oil production, with more gas along the way."

Rachael Seeley, Houston

Tax Credits ...

(continued from page 1)

The most recent legislative move came from US Sen. Bob Menendez (D-New Jersey), who proposed a retroactive extension of NGV tax credits of at least $7,500 for the smallest NGV family cars and up to $64,000 for the largest NGV trucks (NGW Nov.21'11). Under his plan, natural gas fuel fees would kick in at 2.5¢ per gallon of gasoline equivalent in 2014-15 and gradually hit 12.5¢ by 2020-21.

He proposed the measure as an amendment to a "must-pass" transportation bill last year. It received a 51-47 majority of the votes in the Senate, falling short of the 60 needed to proceed with debate. The majority vote revealed that the measure could easily pass as part of another budgetary deal later this year, which would only need a 50% majority for lawmakers to proceed with debate. It could also resurface in other legislative packages on energy or taxation, in which NGV tax credits could be considered more relevant.

Seven conservative think tanks have lobbied against Menendez's measure, a list that includes the American Energy Alliance, Americans for Prosperity and Citizens Against Government Waste. They took issue with the notion that NGV buyers need tax credits to help them weather NGV vehicle prices, which are higher in comparison with conventional vehicles that run on gasoline or diesel.

"If this is truly the problem, there is no need for the federal government to intervene because repaying high upfront costs over time is exactly what banks and other financial institutions deal with every day," the organizations wrote in a letter to the Senate before the vote.

Furthermore, recent investments in new NGV models and corporate fleets should dampen the need for tax breaks, they maintain (NGW Mar.12'12).

"GM and Chrysler announced new natural gas pickups and GE and Chesapeake announced a new partnership to provide natural gas fueling infrastructure," the groups said. "All of these things do not depend on taxpayer dollars, mandates or special treatment."

Menendez's measure is a revamped version of the Nat Gas Act, which originally included tax credits with no offsetting fuel purchase fees. The plan gained a long list of bipartisan backers last year in both the House and Senate, but eventually became trickier in the presence of conservative lobbying.

"Natural gas vehicle subsidies have split conservatives between those seeking energy independence or those more closely aligned with gas-producing regions and those arguing for a free-market approach or those more closely aligned with oil and refining regions," FBR Capital Markets energy policy analyst Ben Salisbury said in a note to clients.

President Barack Obama supports an extension of the credits for the purchase of NGVs and wants them eligible for the same benefits as all-electric vehicles, which would rise to $10,000 per vehicle under the White House's plan, up from $7,500/vehicle available last year (NGW Feb.20'12).

Earlier this year, the administration also steered $30 million in funds for NGV research to be led by the Advanced Research Projects Agency-Energy, with a particular emphasis on developing lightweight vehicle tanks and affordable natural gas compressors for in-home fueling.

A wild card brewing in Washington is a legislative effort to promote flex-fuel vehicles that would partly run on some combination of gasoline, biofuels and natural gas-derived methanol. US Sens. Maria Cantwell (D-Washington) and Richard Lugar (R-Indiana) are pushing a plan that requires a gradual rise in the production of vehicles that are bi- or tri-fuel capable.

They say this could "spur the development and use of alcohol fuels such as ethanol and methanol that can be made from a wide variety of domestic energy resources, including agricultural waste, energy crops, natural gas and even trash."

Methanol is a high-performance, high-octane fuel. Its proponents say the more sources that are competing for market share in the transportation fuels sector, the better.

However, skeptics of methanol as a transportation fuel say it bears most of the same disadvantages of ethanol and then some — the same criticisms that surfaced when California pushed methanol in 1989. For example, methanol is more at risk of igniting an explosion in storage tanks and is more corrosive.

Also, the Btu content of methanol is even lower than ethanol. And although it is less likely to cause a Hollywood-like explosion in a collision than gasoline, it can produce a transparent flame, which can put first responders and victims at risk in a different way.

Lauren O'Neil, Washington

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Market View

US Energy Industry Has a Dismal Record of Chasing Next Big Thing

If history teaches us anything, it's to be wary of too clear a picture of what lies ahead. So when it comes to pronouncements that the US is entering an era of affordable, domestically produced energy, a bit of skepticism is warranted.

Examples of the industry getting ahead of itself abound, i.e. the string of LNG import terminals recently built along the Gulf Coast. But you can't fault their developers. The rational for building them was unassailable as this assessment done in the early 2000s shows:

"Since 1999, announcements of one LNG venture or another seem to come as rapidly as press releases can be prepared. ... And a good many of these projects will be needed. The US is short of gas again, but this time, the situation appears to be a function of geology, not misdirected regulations. To be blunt, the US is drilled out. No matter how many rigs are running, the lack of available prospects means a shortfall is inevitable. It may come this year, it may come next year, it may not happen for two or three years, but increasing demand and decreasing supply will cause a crisis."

Short term, this proved quite prophetic as supply worries escalated and prices rose well above $14/MMBtu in 2008. But prices rapidly deflated and all but collapsed once the shale gas bonanza severed North America's need for the global LNG market.

The latest narrative involves a virtually inexhaustible supply of shale gas that will meet US needs for more than a century, which leading coal-proponent Frank Clemente says only "shows our lack of institutional memory."

Writing on his web site Energy-Facts.org, Clemente castigates the industry's obsessive "search for a silver bullet," as well as its "costly penchant to blithely accept the 'the next greatest thing.'"

He has a point. Cheniere Energy, burned on promises of LNG imports, is doubling down on the promise of a quarter century or more of ample, relatively inexpensive gas supply for export. If history holds, the bubble should burst just about the time it is finishing its first two liquefaction trains.

While the bubble might just deflate as production cutbacks drive prices to levels needed that allow producers to hedge future production (NGW Jan.16'12), Clemente warns that growing reliance on natural gas risks disaster.

"What if we are wrong about shale gas eight years out?" Clemente asks.

That could be very bad, indeed. Bentek Energy estimates that increasing gas-fired power capacity will add 1.4 billion cubic feet per day of potential demand. A lot of that capacity is replacing coal-fired generation, which Clemente estimates will be reduced by 50 to 70 GW by 2020. And having 20 states — including a sizzling Texas — dependent on natural gas for more than half their summer power needs is problematic.

However, it's more likely that shale gas and the new technologies to exploit it are bona fide game changers even if it takes a $4-$5/MMBtu price range to coax enough production to meet petrochemical and power generation demand. Because one thing is clear on the road ahead, a $2-$3/MMBtu market just isn't sustainable.

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The *Natural Gas Week* composite spot wellhead price this week is $1.99/MMBtu, 20¢ less than last week and $1.86 less than the Mar. 21, 2011, average. The spot delivered-to-pipeline price this week is $2.15/MMBtu, 33¢ less than last week and $1.93 less than last year's corresponding average.

Tom Haywood, Houston

GAS PRICE REPORT

($/MMBtu—Spot)
March 19, 2012

	Interstate Wellhead		Intrastate Wellhead		Delivered To Pipeline		Delivered To Utility	
	This Week	Bid Week for Mar	This Week	Bid Week for Mar	This Week	Bid Week for Mar	This Week	Bid Week for Mar
CALIFORNIA								
South	—	—	2.15	2.61	2.17	2.63	2.17	2.63
North	—	—	—	—	2.36	2.54	2.32	2.54
ROCKY MOUNTAINS	1.82	2.28	1.79	2.25	1.94	2.40	2.27	2.73
NEW MEXICO	1.77	2.23	—	—	1.94	2.40	2.09	2.55
TEXAS								
Gulf Coast, Offshore	1.90	2.32	1.91	2.33	1.97	2.39	—	—
Gulf Coast, Onshore	1.89	2.36	1.91	2.38	1.97	2.44	2.12	2.59
Central	—	—	—	—	—	—	—	—
West	1.87	2.34	1.87	2.34	1.94	2.41	2.02	2.49
MID-CONTINENT	1.82	2.28	1.80	2.26	1.92	2.38	2.17	2.49
LOUISIANA								
Gulf Coast, Offshore	1.95	2.34	1.95	2.34	2.02	2.41	—	—
Gulf Coast, Onshore	1.96	2.37	1.96	2.37	2.03	2.44	2.14	2.59
North	1.95	2.33	1.94	2.32	2.02	2.40	2.16	2.54
MIDWEST	—	—	—	—	2.07	2.56	2.09	2.62
APPALACHIA	1.94	2.36	—	—	2.05	2.47	2.13	2.56
SOUTHEAST	1.91	2.32	—	—	2.06	2.47	2.51	2.93
NEW ENGLAND	—	—	—	—	2.23	2.88	2.29	3.06

	Composite Wellhead	Delivered to Pipeline	12-Month Strip Nymex
March 19, 2012	1.99	2.15	2.92
2012 Outlook	3.31	3.48	—